

# Index to Volume 5

## ARTICLES

- A bit-slice controller for cubic spline generation *R. Kalyanakrishnan, C.S. Moghe*, 93
- A progression of wide angle display developments by computer graphics *W. Fetter, C. Wittenberg*, 79
- A multiprocessor architecture for viewing solid models *J.R. Woodward*, 97
- Brightness and contrast of nematic liquid crystal bistable configuration displays *R.N. Thurston, G.D. Boyd*, 15
- Comparison of CRTs and dot matrix flat panels for vehicle instrumentation *P.H.J. Beatty*, 196
- Contrast enhancement of LED, vacuum fluorescent and plasma displays with circular polarizing filters *S. Bennett, G. Trapani*, 159
- Design of a plasma flat pange large screen display for high volume manufacture *P. Pleshko, N. Apperley, L.L. Zimmerman, K.A. Pearson, T.A. Sherk, E.J. St. Pierre, B. Hairabedian, F. Bradney, R.L.J. Foster*, 21
- German standards for display work stations *H. Koch*, 131
- Hierarchical transmission of multi-level images for videotex systems *K.N. Ngan*, 84
- Human factors and information technology: responding to the challenge *National Electronics Council*, 154
- Input and display registration in a stereoscopic workstation *C. Schmandt*, 89
- Interference in thin radiating layers and its application to thin film electroluminescent devices *N.A. Vlasenko*, 135
- Is interlace refresh a practical method for reducing VDU flicker? *D. Bauer*, 33
- Manipulating large pictures using the Perq *P.J. Willis, J.B. Hanson*, 170
- Optimization by colour representation of a twisted nematic display system for car application *R.A. Cremers, B.B. Kosmowski, M.E. Becker, D.A. Mlynski*, 203
- Presenting information to the driver *M. Fowkes*, 215
- Raster graphics display technology: a review *D. Oakley*, 229
- Selected colours for use on colour cathode ray tubes *J. Laycock*, 3
- Some consequences of the shadow-mask CRT dot structure *K.R. Oakey*, 143
- Subjective reactions to misconvergence on a colour display *P.J. Robertson, M.R. Jones*, 165
- The application of ergonomics in the design of automotive displays *M.D. Galer*, 224
- The role of human factors in VTOL aircraft display technology *S.N. Roscoe, J.S. Tatro, E.J. Trujillo*, 149
- The tube of plenty: towards an 'age of television' *A. Briggs*, 70
- Thin film electroluminescent displays produced by atomic layers *T. Sutela*, 73
- Towards the telescreen? Utopian and dystopian musings on the nature of television, 67
- Vacuum fluorescent displays for automotive applications *T. Kishino*, 209

## RESEARCH AND TECHNICAL NOTES

- A cycloramic display using moire enlargement of periodic picture arrays *W. Dultz*, 37
- A novel technique for the accurate determination of average tilt angle in twisted nematic cells *B.B. Kosmowski, M.E. Becker, D.A. Mlynski*, 104

## EDITORIALS

67, 195

## AUTHORS OF ARTICLES, RESEARCH AND TECHNICAL NOTES

- N. Apperley* see *P. Pleshko et al*, 21
- D. Bauer* Is interlace refresh a practical method for reducing VDU flicker?, 33
- P.H.J. Beatty* Comparison of CRTs and dot matrix flat panels for vehicle instrumentation, 196
- M.E. Becker* see *B.B. Kosmowski et al*, 104
- M.E. Becker* see *R.A. Cremers et al*, 203
- S. Bennett, G. Trapani* Contrast enhancement of LED, vacuum fluorescent and plasma displays with circular polarizing filters, 159
- G.D. Boyd* see *R.N. Thurston*, 15
- F. Bradney* see *P. Pleshko et al*, 21
- A. Briggs* The tube of plenty: towards an 'age of television', 70
- R.A. Cremers, B.B. Kosmowski, M.E. Becker, D.A. Mlynski* Optimization by colour representation of a twisted nematic display system for car application, 203
- W. Dultz* A cycloramic display using moire enlargement of periodic picture arrays, 37
- W. Fetter, C. Wittenberg* A progression of wide angle display developments by computer graphics, 79
- R.L.J. Foster* see *P. Pleshko et al*, 21
- M. Fowkes* Presenting information to the driver, 215
- M.D. Galer* The application of ergonomics in the design of automotive displays, 224
- B. Hairabedian* see *P. Pleshko et al*, 21
- J.B. Hanson* see *P.J. Willis*, 170
- M.R. Jones* see *P.J. Robertson*, 165
- R. Kalyanakrishnan, C.S. Moghe* A bit-slice controller for cubic spline generation, 93
- T. Kishino* Vacuum fluorescent displays for automotive application, 209
- H. Koch* German standards for display work stations, 131
- B.B. Kosmowski, M.E. Becker, D.A. Mlynski* A novel technique for the accurate determination of average tilt angle in twisted nematic cells, 104
- B.B. Kosmowski* see *R.A. Cremers et al*, 203
- J. Laycock* Selected colours for use on colour cathode ray tubes, 3
- D.A. Mlynski* see *B.B. Kosmowski et al*, 104
- D.A. Mlynski* see *R.A. Cremers et al*, 203
- C.S. Moghe* see *R. Kalyanakrishnan*, 93
- National Electronics Council* Human factors and information technology: responding to the challenge, 154
- K.N. Ngan* Hierarchical transmission of multi-level images for videotex systems, 84

- K.R. Oakey* Some consequences of the shadow-mask CRT dot structure, 143
- D. Oakley* Raster graphics display technology: a review, 229
- K.A. Pearson* see *P. Pleshko et al*, 21
- P. Pleshko, N. Apperley, L.L. Zimmerman, K.A. Pearson, T.A. Sherk, E.J. St. Pierre, B. Hairabedian, F. Bradney, R.L.J. Foster* Design of a plasma flat panel large screen display for high volume manufacture, 21
- P.J. Robertson, M.R. Jones* Subjective reactions to misconvergence on a colour display technology, 149
- E.J. St. Pierre* see *P. Pleshko et al*, 21
- C. Schmandt* Input and display registration in a stereoscopic workstation, 89
- T.A. Sherk* see *P. Pleshko et al*, 21
- T. Sutela* Thin film electroluminescent displays produced by atomic layers, 73
- J.S. Tatro* see *S.N. Roscoe et al*, 149
- R.N. Thurston, G.D. Boyd* Brightness and contrast of nematic liquid crystal bistable configuration displays, 15
- G. Trapani* see *S. Bennett*, 159
- E.J. Trujillo* see *S.N. Roscoe et al*, 149
- N.A. Vlasenko* Interference in thin radiating layers and its application to thin film electroluminescent devices, 135
- P.J. Willis, J.B. Hanson* Manipulating large pictures using the Perq, 170
- C. Wittenberg* see *W. Fetter*, 79
- J.R. Woodwork* A multiprocessor architecture for viewing solid models, 97
- L.L. Zimmerman* see *P. Pleshko et al*, 21

## RESEARCH REPORTS

- NHK (Japan Broadcasting Corporation), 108
- Sony Corporation, 174

## NEWS

- Aerospace quality testing for interference applied to cars, 239
- Awards for videotex and simulator displays, 181
- Bi-colour LED arrays provide low-power aerial advertising, 111
- Car displays to boom, 112
- Car navigation display uses satellite data, 239
- Cars switch away from VFDs to full LCDs in Japan and Europe, 236
- Chair established for ECD and LCD research, 113
- Chinese character scrolling display terminal wins export concession, 245
- Citizen joins ranks of LC TV manufacturers, 46
- Colour and swivel first for terminal range, 181
- Colour comes to twisted nematic and guest-host LCDs, 47
- Colour desktop workstation for engineers has virtual second screen capability, 244

- Colour LC TV on market, 242
- Colour message display, 46
- Colour TV folds up, 46
- Combat sub displays, 42
- Converters and inverters for active displays, 112
- CRT systems consultant, 243
- Double mode LED array touch interaction added to colour terminal range, 177
- Editorial board, 178
- El and plasma additions to panel range, 182
- Electroluminescent maps, 46
- Electronic mail proposals, 44
- Electrostatic high-res CRTs, 113
- Ergonomics community criticizes slow start by Alvey MMI group, 176
- Expanded bandwidth gives photographic quality to raster VDUs, 178
- Expanding fibre optics, 110
- Fibre optic display assists airliner docking manoeuvres, 110
- Flat TVs herald new era in design, says study, 45
- Flexibility comes to LCDs, 48
- Flight trials attest superiority of holographic head-ups, 241
- Four million pixels achieve A4 document legibility on screen, 242
- Graphics for animation, 179
- Graphics in Europe, 113
- High resolution displays for Navy minehunters, 179
- In-car data terminal is Alvey demo project, 110
- Intelligent telephone-answering with colour CRT interface, 240
- Landscape or portrait, 45
- Large LCDs for dashboards, 180
- LEDs bring cars to a halt, 47
- Lighting-up time for Britain's emergency service control VDU operators, 41
- Low cost colour graphics capability for plant mimics and histogram displays, 243
- Low power LCDs provide in-flight emergency instrumentation, 180
- Mass production comes to LCDs and LEDs while EL catches up, 177
- Modular transreflective LCD signs up to any size, 45
- Multi-line discharge panels, 113
- New BCS group for computer friendliness, 182
- New interconnects for EL, 239

NHK ready to test high-definition TV, 44

Olympic Games IBM staff use LCD handheld terminals to speed support, 244

Photolithographic colour LC TV, 48

Plasma panel has memory and efficient addressing, 243

Pull-out failure display, 241

Royal Navy orders expanded radar video generations, 41

Same trends in USA, 237

Sinclair releases flat CRT TV as Sony rethinks its Watchman, 40

16-bit digitizing more accurate and reliable, 44

Smallest battery to power calculator displays, 177

Special relationship, 43

Stray fields reduced, 44

Subtractor image comparison, 182

Tornado video contract, 182

Touch screen terminal cuts test times in ATE, 113

Twelve-line ac plasma panel, 179

US council slams Europe's VDU hazard research, 43

US electronics initiative, 181

Videotex service from scientific computer systems, 245

Visual message radio pager, 45

Wall-size plasma screens, colour and higher resolution, 43

Watchman cost halved with redesigned flat tube, 47

Who's who in fifth generation man-machine interface funding, 42

## Literature

CRT standards 'ongoing', 183

Faster framestore planned for map and graphics display, 114

Framework needed to build man-machine interaction research strategy, 183

Higher contrast obtained for static

ECDs using backscattered light, 49

Silicon LC light valve performance for large screen display systems, 114

## Patents

Blinkered view gives new possibilities for three-dimensional pictures, 50

Dual memory gives tones, 116

Easier fabrication LCD, 183

LC array displays stills, 183

Less wire for car VFDs, 117

Liquid crystal car dashboard displays backlit for use night and day, 115

Map displays and inertial navigation come down to earth, 50

Multiple electron beams generate colour picture on flat CRT, 116

Pigmented filter cuts contrast losses in VDUs, 116

Plastic card calculators use flexible LCDs, 117

Positive mode LC light valve with grey scale, 116

Quadrupled LC TV screen area, 183

Scan line vanishing trick, 117

Square-wave LCD operation, 117

UK responds to LC TV challenge with single crystal silicon, 115

User-serviceable CRT, 116

Wet sponge display effect, 117

## CONFERENCES

Colour-coded versus monochrome electronic displays (28 February-1 March 1984), 184

Computer graphics '83 (18-20 October 1983), 57

Electronic displays '83 (1-3 November 1983), 123

Eurographics '83 (31 August-2 September 1983), 52

Eurographics UK (10-11 September 1983), 186

Fourth international congress on automotive electronics (22-24 May 1984), 246

International workshop on electroluminescence (16-20 October 1983), 54

Japan display '83 (3-5 October 1983), 118

Realism in computer generated images (7 March 1984), 185

SID international symposium (9-13 May 1983), 51

SID international symposium (4-8 June 1984), 246

State of the art in displays and display technology (23 May 1984), 249

Will computers always be difficult to use? (6 June 1984), 248

## BOOK REVIEWS

Advances in image pick-up and display, volume six *Edited by B. Kazan* (reviewed by J.R. Mansell, G.F. Weston), 122

Alphanumeric displays *G.F. Weston, R. Bittleston* (reviewed by P. Hart), 188

Colour science in television and display systems *W.N. Sproson* (reviewed by J. Laycock), 251

Ergonomic principles in office automation *Various authors* (reviewed by D. Whitfield), 60

Fundamentals of interactive computer graphics *J.D. Foley, A. Van Dam* (reviewed by G.C. Barney), 188

Health hazards of VDTs? *Edited by B. Pearce* (reviewed by R. Weale), 251

Presentation of computer I/O for people *J. Abbott* (reviewed by T. Stewart), 190

Transmitted-picture assessment *J.W. Allnatt* (reviewed by T. Stewart), 189

Trends in information transfer *Edited by P.J. Hills* (reviewed by D. Canter), 59